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A randomized trial of direct mailing of fecal occult blood tests to increase colorectal cancer screening.

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BACKGROUND: Although colorectal cancer screening by using a fecal occult blood test (FOBT), flexible sigmoidoscopy, colonoscopy, or barium enema x-ray reduces the incidence of and death from colorectal cancer, the rate of colorectal cancer screening in the general population is low. We conducted a randomized trial consisting of direct mailing of FOBT kits to increase colorectal cancer screening among residents of Wright County, Minnesota, a community in which colorectal cancer screening was promoted. **METHODS:** At baseline, we mailed a questionnaire about colorectal cancer screening to a random sample of Wright County residents aged 50 years or older who were randomly selected from the Minnesota State Driver's License and Identification Card database (estimated N =1451). The sample was randomly allocated into three equal subgroups: one group (control) received only the questionnaire, one group received FOBT kits by direct mail with reminders, and one group received FOBT kits by direct mail without reminders. Study participants were sent a follow-up questionnaire 1 year after baseline. We used the responses to the questionnaires to estimate the 1-year change in self-reported screening rates in each group and the differences in the changes among the groups, along with the associated bootstrap 95% confidence intervals (CIs). **RESULTS:** At baseline, the estimated response rate was 86.5%, self-reported adherence to FOBT guidelines was 21.5%, and overall adherence to any colorectal cancer screening test guidelines was 55.8%. The 1-year rate changes in absolute percentage for self-reported adherence to FOBT use were 1.5% (95% CI = -2.9% to 5.9%) for the control group, 16.9% (95% CI = 11.5% to 22.3%) for the direct-mail-FOBT-with-no-reminders group, and 23.2% (95% CI = 17.2% to 29.3%) for the direct-mail-FOBT-with-reminders group. The 1-year rate changes for self-reported adherence to any colorectal cancer screening test were 7.8% (95% CI = 3.2% to 12.0%) for the control group, 13.2% (95% CI = 8.4% to 18.2%) for the direct-mail-FOBT-with-no-reminders group, and 14.1% (95% CI = 9.1% to 19.1%) for the direct-mail-FOBT-with-reminders group. **CONCLUSION:** Direct mailing of FOBT kits combined with follow-up reminders promotes more rapid increases in the use of FOBT and nearly doubles the increase in overall rate of adherence to colorectal cancer screening guidelines in a general population compared with a community-wide screening promotion and awareness campaign.